

Notice of Allowability

Application No.

09/459,493

Examiner

Carl Colin

Applicant(s)

RUBIN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed on 2/28/2007.
2. ☒ The allowed claim(s) is/are 1,3-14,16-27,29-36,38-53,55-66 and 68-80.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

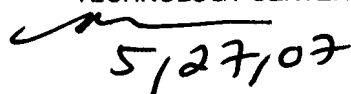
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>5/21/2007</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

NASSER MOAZZAMI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100


5/27/07

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's Representative, Michael A. Oblon on May 21, 2007.

The application has been amended as follows:

In claim 1, amend the second paragraph, which is the first claim limitation to include "at least one portion that is" before the phrase "proprietary data" and before the phrase "non-proprietary data" as follows:

storing on a computer memory image data that is to be transmitted to a video RAM for display on a video display device, wherein the image data includes at least one portion that is proprietary data and at least one portion that is non-proprietary data;

Response to Arguments

2. Applicant's remarks filed on 2/28/2007, pages 18-27 have been fully considered and they are persuasive as amended. Claims 1, 3-14, 16-27, 29-36, 38-53, 55-66, and 68-80 are presented for examination.

Reasons for Allowance

3. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record, (US Patent 5,881,287 to Mast) teaches a method and apparatus for securing images for unlicensed appropriation on a computer system. Unlicensed transfers of image data from the video adapter to other storage are prevented by intercepting data transfer requests to the operating system and identifying whether the image is one to be protected. Mast discloses if the image is one that is marked for protection, the region of the data transfer incorporating the protected image is blacked out or replaced with a specified pattern or message. Software routines interface with the computer memory to block the copying of designated images by means of hooks into the operating system or operating system environment. Another preferred embodiment includes an encryption scheme form image security prior to display. The prior art of record, (US Patent 5,986,676 to Dwin et al), teaches a method and device for protecting pixel locations on a display screen containing graphics data from being overwritten. A controller reads the protection data from the lock buffer and generates control signals which inhibit the writing of data into protected areas of the display section. It appears to the Examiner that both prior arts require auxiliary data in order to distinguish between portions of the image data that are protected and non-protected contrarily to the present invention as mentioned by Applicant in the remarks on page 22. The prior arts of record either alone or in combination fail to teach:

"...modifying least significant bits of the image data to distinguish between proprietary data and non-proprietary data; and wherein if after an instruction to copy the image data from the video

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RAM is received, replacing the portions of the image data that are distinguished as being proprietary data with substitute data based upon the least significant bits of the image data”
as claimed in claim 1.

“...a digital filter identifying the proprietary data within the stored image data, and modifying least significant bits of the image data prior to its arrival at the video RAM on the first data bus; and a pixel processor distinguishing between the portions of the image data in the video RAM that are proprietary data and the portions of the image data in the video RAM that are non-proprietary data, based on the least significant bits of the image data, and replacing the portions of the image data that are distinguished as being proprietary data, with substitute data, after an instruction to copy the image data from the video RAM is received”
as claimed in claim 14.

“...modifying least significant bits of the image data prior to its being received by the video RAM, thereby generating modified image data within which the portions of the image data in the video RAM that are proprietary data and the portions of the image data in the video RAM that are non-proprietary data can be distinguished from one another, based on the least significant bits of the image data”
as claimed in claim 27.

“...a digital filter identifying the proprietary data within the stored image data, and modifying least significant bits of the image data prior to its arrival at the video RAM on the data bus, thereby generating modified image data within the portions of the image data in the video RAM that are proprietary data and the portions of the image data in the video RAM that are non-proprietary data can be distinguished, based on the least significant bits of the image data”

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as claimed in claim 36.

“...distinguishing between the portions of the image data in the video RAM that are proprietary data and the portions of the image data in the video RAM that are non-proprietary data, based on the least significant bits of the image data; and replacing the portions of the image data that are distinguished as being proprietary data, with substitute data, after an instruction to copy the image data from the video RAM is received”

as claimed in claim 45.

“...a pixel processor distinguishing between the portions of the image data in the video RAM that are proprietary data and the portions of the image data in the video RAM that are non-proprietary data, based on the least significant bits of the image data, and replacing the portions of the image data that are distinguished as being proprietary data, with substitute data, after an instruction to copy the image data from the video RAM is received”

as claimed in claim 50.

“...modifying stored image data by adjusting least significant bits of the image data so as to mark at least one portion of the image data as being protected data; after an instruction to copy the image data from the video RAM is received, recognizing the portions of the image data that are marked as being protected data, from the least significant bits of the image data; and replacing the recognized as being protected data, with substitute data”

as claimed in claim 53.

*“...a second pixel processor recognizing the portions of the image data that are marked as being protected data, from the least significant bits of the image data, and replacing the recognized portions of the image data that are marked as being protected, with substitute data, after an instruction to copy the image data from the video RAM is received”
as claimed in claim 66.*

Consequently, claims 1, 3-14, 16-27, 29-36, 38-53, 55-66, and 68-80 are allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carl Colin whose telephone number is 571-272-3862. The examiner can normally be reached on Monday through Thursday, 8:00-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Nasser G. Moazzami can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cc

Carl Colin
Patent Examiner
May 22, 2007

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[Signature]
5,27,07